Newcastle Disease (ND) Response Ready Reference Guide— Overview of the ND Response Plan: The Red Book

This document provides a brief overview of the *ND Response Plan: The Red Book.* It is intended to be an easy to use reference for responders at all levels. Please see the *ND Response Plan* for details on this guide, available at http://www.aphis.usda.gov/fadprep.

Goals of an ND Response

The goals of an ND response are to (1) detect, control, and contain ND in poultry as quickly as possible; (2) eradicate ND using strategies that seek to protect public health and the environment, and stabilize animal agriculture, the food supply, and the economy; and (3) provide science- and risk-based approaches and systems to facilitate continuity of business for non-infected poultry and non-contaminated poultry products.

Achieving these three goals will allow individual poultry facilities, States, Tribes, regions, and industries to resume normal production as quickly as possible. They will also allow the United States to regain ND-free status without the response effort causing more disruption and damage than the disease outbreak itself.

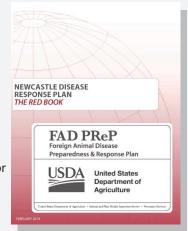
Three Epidemiological Principles of Response

There are three basic epidemiological principles that will form the foundation of any ND response effort.

- 1. Prevent contact between ND virus and susceptible poultry.
- 2. Stop the production of ND virus by infected or exposed poultry.
- 3. Increase the disease resistance of susceptible poultry to the ND virus.

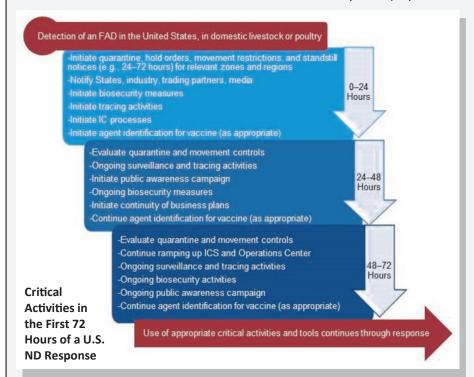
Response Strategies

The lead strategy for controlling and eradicating ND in poultry is stamping-out; however, emergency vaccination strategies may be considered if conditions, such as a lack of resources for stamping-out, direct the response away from stamping-out as a single strategy. Any decision to deviate from stamping-out as an exclusive response strategy will be based on epidemiological circumstances at the time of an outbreak.



ND Response Critical Activities

Critical activities and tools must be implemented to execute and support any response strategy. A science- and risk-based approach that protects public health, animal health, and the environment and stabilizes animal agriculture, the food supply, and the economy must be used at all times. Some of the critical activities that may be employed are as follows:



- ◆ Public awareness campaign
- ◆ Swift imposition of effective quarantine and movement controls
- ◆ Rapid diagnosis and reporting
- ◆ Epidemiological investigation and tracing
- ♦ Increased surveillance
- Continuity of business measures for non-infected premises and noncontaminated poultry products
- ♦ Biosecurity measures
- Mass depopulation and euthanasia, potentially including pre-emptive culling
- ♦ Cleaning and disinfection measures
- Effective and appropriate disposal procedures
- ◆ Emergency vaccination (as the response strategy indicates).

Stamping-Out

Stamping-out is the depopulation of clinically affected and in-contact susceptible poultry. The key elements and critical goals of stamping-out include:

- ♦ Within 24 hours of, or as soon as possible after, a premises being classified as an Infected Premises (IP), infected poultry will be depopulated in the quickest, safest, and most humane way possible.
 - ♦ In many cases, poultry on Contact Premises (CP) may also be depopulated.
- ♦ Where resources are limited, premises will be prioritized so that those with the highest potential to actively spread ND will be stamped-out first.
- ◆ Based on the epidemiology of the outbreak, prioritizing the poultry to depopulate first may be necessary.
- ♦ Public concerns about stamping-out require a well-planned and proactive public relations and liaison campaign. Stakeholders, the public, and the international community must be involved.

Vaccination

Although stamping-out is the preferred and primary response strategy in an ND outbreak, emergency vaccination may also be considered in specific circumstances; under such circumstances there are two vaccination strategies that could be employed with stamping-out.

Emergency vaccination to kill: The goal of this strategy is to suppress virus replication in high-risk, susceptible poultry using emergency vaccination and then killing vaccinates at a later date. An example of this strategy would be the targeted vaccination of high-risk, susceptible poultry surrounding an IP or Infected Zone (IZ).

Emergency vaccination to live: The goal here is to protect susceptible poultry from infection using emergency vaccination with the intent that vaccinates live out their useful lives. Targeted vaccination may be performed on layers, valuable genetic stock, or endangered birds.

The use of emergency vaccination will be determined by the Incident Commander, the State Animal Health Official(s), and the Veterinary Services Deputy Administrator (Chief Veterinary Officer). The decision to use emergency vaccination will be based on the consideration of the following:

- ♦ Probability that the disease can be rapidly contained;
- ♦ Proximity of high-value birds to the disease focal point;
- ♦ Risk to valuable, rare, or endangered nondomestic species;
- ♦ Poultry density in an area;
- ◆ Increased risk of introduction due to the presence of ND in neighboring countries;
- ♦ Availability of physical and human resources;

- ♦ Extent to which disease is found in waterfowl, other wild birds, backyard flocks, or in live bird markets;
- ◆ Sociopolitical factors (such as the public's confidence in commercial poultry products);
- ♦ Impact on international trade; and
- ♦ Economic consequences of failure to control the disease.

Coordinated Public Awareness Campaign

In all ND outbreaks, a public awareness campaign must be effectively coordinated. This will support the response strategy by

- engaging and leveraging Federal, State, Tribal, local, and stakeholder relationships to provide unified messages for local, national, and international audiences;
- addressing issues and concerns relating to food safety, public health, the environment, and animal welfare;
- ♦ addressing issues and concerns related to interstate commerce, continuity of business, and international trade; and
- widely disseminating key messages to consumers and producers.

Communication

Six key messages will be delivered in an ND outbreak:

For consumers:

- 1. ND is not a food safety issue.
- 2. Properly prepared eggs and poultry are safe to eat.
- 3. We are responding quickly and decisively to eradicate the disease.



For producers:

- 1. You are the best protection your birds have.
- Protect your flocks with good biosecurity practices. (For more information, please visit http://www.aphis.usda.gov/animal_health/birdbiosecurity/end/.)
- 3. Know the signs of ND, and be vigilant in reporting signs of illness.